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Eugene S. Smotkin

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* EUGENE S. SMOTKIN

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Appeal 2009-011268  
Application 09/891,200  
Technology Center 1700

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Decided: January 22, 2010

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Before JEFFREY T. SMITH, LINDA M. GAUDETTE, and  
KAREN M. HASTINGS, *Administrative Patent Judges*.

GAUDETTE, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's decision finally rejecting claims 75-82 and 84-91 (Final Office Action, mailed Dec. 12, 2006, 1), the only claims pending in the application.<sup>1</sup>

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<sup>1</sup> An oral hearing was held on Jan. 13, 2010.

(Appeal Brief (“App. Br.”), filed Oct. 3, 2007<sup>2</sup>, 3.) We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART.

### BACKGROUND

Appellant describes the invention as “resid[ing] in constructing an electrolyte that is useful in a membrane electrode assembly (MEA) for a fuel cell where operability at high temperatures is provided by use of an electrolyte that is inorganic and lacks a liquid phase.” (App. Br. 7.) A membrane electrode assembly (MEA) is “the core of the fuel cell.” (Spec. 8:3.) In a conventional polymer electrolyte fuel cell, the MEA includes three layers: a polymer electrolyte sandwiched between two catalytic layers. (Spec. 3:17-20.) The electrolyte is a two dimensional membrane. (Spec. 3:15-16.)

Independent claims 75 and 84, the sole independent claims on appeal, are reproduced below:

75. A proton-conducting membrane designed to serve as an electrolyte in a fuel cell, which membrane consists essentially of

a single metal or metal hydride support, wherein

one or both faces of said support is coated with an electronically-insulating proton-conducting coating, which coating consists of an inorganic material that contains no liquid phase, said coating having a thickness such that the area-specific resistance for protons is in the range of 0.01-100  $\Omega \cdot \text{cm}^2$  at at least one temperature between 220°C and 550°C.

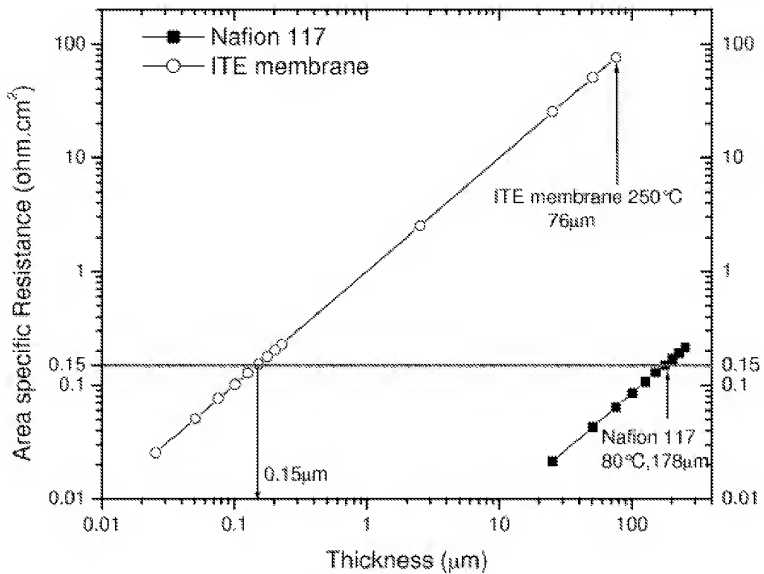
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<sup>2</sup>See Decision granting Appellant’s Dec. 21, 2007 “PETITION UNDER 37 CFR 1.181,” mailed Feb. 22, 2008 (instructing the Examiner to consider the Substitute Appeal Brief filed Oct. 3, 2007).

84. A proton-conducting membrane designed to serve as an electrolyte in a fuel cell, which membrane consists essentially of

a single metal or metal hydride support, wherein

one or both faces of said support is coated with an electronically-insulating proton-conducting coating, which coating consists of an inorganic material that contains no liquid phase, said coating having a thickness such that the ASR for protons at at least one temperature between 220°C and 550°C is in the range shown for Nafion® 117 in Figure 10:



The Examiner relies on the following evidence to establish unpatentability of the appealed claims (Examiner's Answer ("Ans."), mailed May 30, 2008, 2-3):

Baucke	5,094,927	Mar. 10, 1992
Smotkin	5,846,669	Dec. 08, 1998
Crome	5,985,113	Nov. 16, 1999
Dohle (WO '777)	WO 9821777	May 22, 1998

Truls Norby, *Solid-State Protonic Conductors: Principles, Properties, Progress and Prospects*, in 125 Solid State Ionics 1-11 (Elsevier 1999) (hereafter Norby).

Kwang Hyun Ryu & Sossina M. Haile, *Chemical Stability and Proton Conductivity of Doped BaCe03-BzZrO3 Solid Solutions*, in 125 Solid State Ionics 335-367 (Elsevier 1999) (hereafter Ryu).

Dorthe Lybye & Nikolaos Bonanos, *Proton and Oxide Ion Conductivity of Doped LaScO3*, in 125 Solid State Ionics 339-344 (Elsevier 1999) (hereafter Lybye).

The Examiner maintains (Ans. 3-31), and Appellant requests review of, the following grounds of rejection (App. Br. 6):

1. claims 84-91 under 35 U.S.C. § 112, second paragraph, as indefinite;
2. claims 75-82 and 84-91 under 35 U.S.C. § 103(a) as unpatentable over Smotkin in view of Norby, Crome, Ryu, or Lybye;
3. claims 75-82 and 84-91 under 35 U.S.C. § 103(a) as unpatentable over WO '777 in view of Norby, Crome, Ryu, or Lybye; and
4. claims 75, 76, 80, 81, 84, 85, 89, and 90 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as unpatentable over Baucke.

*Rejection of claims 84-91 under  
35 U.S.C. § 112, second paragraph, as indefinite*

With respect to the first ground of rejection, the issue presented for our review is: has Appellant shown reversible error in the Examiner's determination that claims 84-91 are indefinite under 35 U.S.C. § 112, second paragraph, because independent claim 84 (1) contains the trademark/trade name NAFION and (2) includes a figure?

For the reasons explained below, we find that Appellant has identified reversible error in the Examiner's determination.

The Examiner, relying on our decisions in *Ex Parte Simpson*<sup>3</sup> and *Ex Parte Fressola*,<sup>4</sup> respectively, contends that claim 84 is indefinite due to the recitation of the trademark/trade name NAFION and Figure 10. (Ans. 3-4.) No additional substantive arguments have been advanced in support of the Examiner's conclusion that claim 84 would not reasonably apprise those skilled in the art of its scope. (*See generally*, Ans.)

A claim is considered indefinite under 35 U.S.C. § 112, second paragraph, if it does not reasonably apprise those skilled in the art of its scope. *See IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1383-84 (Fed. Cir. 2005).

Appellant has persuasively argued that the holdings in *Ex Parte Simpson* and *Ex Parte Fressola* do not apply to the facts in this appeal. In *Ex Parte Simpson*, we held that if a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim scope does not comply with the requirements of 35 U.S.C. § 112,

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<sup>3</sup> 218 USPQ 1020 (BPAI 1982).

<sup>4</sup> 27 USPQ2d 1608 (BPAI 1993).

second paragraph. 218 USPQ at 1022. “Nafion®” is not used in claim 84 to identify or describe a particular material or product. Rather, “Nafion® is simply a label on a depicted graph and the word Nafion® is used simply to refer to the label.” (App. Br. 8.)

In *Ex Parte Fressola*, we held that “[i]ncorporation into the claims by express reference to the specification and/or drawings is not permitted except in very limited circumstances.” 27 USPQ2d at 1609. Claim 84 “does not incorporate by reference a figure or table, it displays the figure and pinpoints the elements of the figure that relate to the limitations of the claim.” (App. Br. 9.)

Because Appellant has shown reversible error in the facts and reasons relied on by the Examiner in rejecting claims 84-91 under 35 U.S.C. § 112, second paragraph, we do not sustain this ground of rejection.

*Rejections of claims 75-82 and 84-91 under 35 U.S.C. § 103(a)  
as unpatentable over Smotkin or WO ‘777 in view of  
Norby, Crome, Ryu, or Lyby*

With respect to the above-identified second and third grounds of rejection, two issues are presented for our review:

1. Has Appellant shown that the Examiner’s obviousness determinations as to claims 75-77, 80-82, 84-86, and 89-91 cannot be sustained because they are based on erroneous findings that Smotkin and WO ‘777 disclose coating materials as claimed?

2. Has Appellant shown that the Examiner’s obviousness determinations as to claims 78, 79, 87, and 88 cannot be sustained because the Examiner has not properly explained the motivation to substitute the materials of the secondary references for the coatings used in Smotkin and WO ‘777?

We answer both of these questions in the affirmative for the reasons explained below.

Issue 1

The Examiner does not rely on the secondary references in concluding that the subject matter of claims 75-77, 80-82, 84-86, and 89-91 would have been obvious to one of ordinary skill in the art at the time of the invention. (*See e.g.*, Ans. 8-10 (regarding Smotkin's disclosure) and Ans. 20-22 (regarding WO '777's disclosure).) Rather, the Examiner's rejections of these claims are based on the following findings:

the coating materials of the prior art fully satisfy the claimed requirement of being either an inorganic material (*i.e. Smotkin's concentrated phosphoric acid in a silicon carbide matrix or concentrated potassium hydroxide in a potassium hexatitanate matrix*) or composite non-liquid material (*i.e. Smotkin's Nafion 115 polymer or the WO '777 free-standing polymer membrane*).

(Ans. 43.)

Appellant maintains that claims 75 and 84 require coatings which both consist of an inorganic material and contain no liquid phase. Appellant argues that Smotkin's disclosure is limited to fuel cells in which the material corresponding to the claimed coating contains a liquid phase. (App. Br. 12 (arguing that Smotkin's metal foil (support) is used solely as a barrier to prevent the liquid electrolytes (coatings) from mixing).) Appellant argues that the coating materials (electrolytes (4) and (6)) of WO '777 "are polymers, and are thus necessarily organic materials." (App. Br. 15.)

The Examiner does not disagree with Appellant's characterization of Smotkin's and WO '777's coatings. (*See generally*, Ans.) Rather, the Examiner contends that Appellant's claimed coating reads on Smotkin's and



WO ‘777’s coatings because “in its broadest-semantically reasonable interpretation, . . . the present claim language encompasses two extremely large groups of materials: a ) any inorganic material (regardless of its state {liquid, solid or gas or plasma}), or b) any composite non-liquid material.” (Ans. 43.)

The Specification states that “[f]or purposes of this invention, a MEA comprises at least an electrode layer, e.g., an anode or a cathode, . . . a counter electrode, e.g., a cathode or an anode,” and “an EIPC.” (Spec. 14:7-10.) “An EIPC is any material capable of conducting protons but is electronically insulating.” (Spec. 28:8-9.) The EIPC used in the invention is supported on a metal or metal hydride foil. (Spec. 23:7-12.) The metal used for the support may be nickel. (Claims 76 and 86.) “High temperature EIPC are typically inorganic or composites of inorganic materials and polymeric (organic) binders.” (Spec. 28:11-12.) According to the Specification, “[a] characteristic of the high temperature electrolyte MEA described in th[e] invention is that is [sic, it] does not require the addition of any liquid phase (e.g. water or free acids) to maintain proton conductivity.” (Spec. 25: 1-3).

Based on the foregoing factual findings, it is apparent that the Examiner and Appellant disagree over the scope and meaning of the phrase “which coating consists of an inorganic material that contains no liquid phase” (claims 75 and 84). Therefore, our consideration of the first issue presented begins with interpretation of the claim language in dispute. *See Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1351 (Fed. Cir. 2001) (“Only when a claim is properly understood can a determination be made . . . whether the prior art anticipates and/or renders obvious the

claimed invention.”); *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567-68 (Fed. Cir. 1987) (In making a patentability determination, analysis must begin with the question, “*what is the invention claimed?*” since “[c]laim interpretation, . . . will normally control the remainder of the decisional process.”).

During examination, claims terms must be given their broadest reasonable construction consistent with the Specification. *In re Icon Health and Fitness, Inc.*, 496 F.3d 1374, 1378-79 (Fed. Cir. 2007). “[E]ach claim does not necessarily cover every feature disclosed in the specification. When the claim addresses only some of the features disclosed in the specification, it is improper to limit the claim to other, unclaimed features.” *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 689-90 (Fed. Cir. 2008) (quoting *Ventana Med. Sys., Inc. v. Biogenex Labs., Inc.*, 473 F.3d 1173, 1181 (Fed. Cir. 2006)). *See also, Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1331 (Fed. Cir. 2004) (“[P]atentees [are] not required to include within each of their claims all of [the] advantages or features described as significant or important in the written description.”).

The appropriate starting point for claim construction “is always with the language of the asserted claim itself.” *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998).

Generally, terms in a patent claim are given their plain, ordinary, and accustomed meaning to one of ordinary skill in the relevant art. After identifying the plain meaning of a disputed claim term, the court examines the written description and the drawings to determine whether use of that term is consistent with the ordinary meaning of the term.

*Prima Tek II, L.L.C. v. Polypap, S.A.R.L.*, 318 F.3d 1143, 1148 (Fed. Cir. 2003) (citations omitted).

We have reviewed the disputed claim language in light of the Specification. However, we do not find, nor has the Examiner identified, any disclosure which supports an interpretation other than the plain meaning of the claim language itself. The fact that the Specification may describe the use of organic materials or suggest that the EIPC could include a liquid phase is not a reason to broaden claim language which, on its face, is clearly limited to an inorganic material which does not have a liquid phase. Therefore, like Appellant, we interpret claims 75 and 84 as requiring a coating that is “an inorganic material that contains no liquid phase.”

The Examiner has not attempted to refute Appellant’s contention that Smotkin fails to disclose or suggest coatings (electrolytes) having no liquid phase and that WO ‘777 fails to disclose or suggest inorganic coatings (electrolytes). Because, the claims require a coating which consists of “an inorganic material that contains no liquid phase” (claims 75 and 84), Appellant has persuasively argued that the Examiner failed to establish a prima facie case of obviousness as to appealed claims 75-77, 80-82, 84-86, and 89-91.

#### Issue 2

The Examiner relies on Norby, Crome, Ryu, and Lyby for disclosures of the specifically recited proton conductor materials of claims 78, 79, 87, and 88. (*See e.g.*, Ans. 10 (“Smotkin . . . does not expressly disclose the specific coating material.”) and Ans. 22 (“[T]he WO ‘777 publication fails to reveal the particular coating material.”).) The Examiner specifically contends that it would have been obvious to have used these materials as a

coating on Smotkin's material 17 or the blocking layer 5 of WO '777 since the secondary references identify them as suitable solid-state protonic conductors which can be used in fuel cell applications, such as hydrogen permeable membranes. (*See e.g.*, Ans. 11 and 22-23.)

Appellant concedes that "some of the materials listed in claims 78-79 and claims 87-88 were known as proton-conducting electron-insulating (EIPC) materials prior to the time of the invention" as taught by the secondary references. (App. Br. 11.) However, Appellant contends that the Examiner has not provided sufficient explanation as to why one of ordinary skill in the art would have been motivated to substitute the materials of the secondary references for the coatings used in Smotkin (inorganic, liquid-containing electrolytes) and WO '777 (organic, solid electrolytes). (*See* App. Br. 12-14 and 18-20.) Appellant points out that "Norby explicitly teaches away from using the disclosed materials in the required temperature range" (App. Br. 11, para. bridging 12-13, and 18; *see also*, Rep. Br. 4), i.e., "between 220°C and 550°C" (claims 75 and 84).

The following statements are representative of the Examiner's responses to Appellant's arguments: "[i]n response to appellant's argument that '*No motivation has been shown for combining . . .*', the fact that appellant has recognized another advantage/disadvantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious" (Ans. 43); "[i]n response to appellant's argument that there is no suggestion to combine . . . *the applied references are combinable between them simply because they all address the same problem of providing suitable membrane components per se as instantly claimed*" (Ans. 45); "[a]rguments that the

alleged anticipatory prior art is ‘*nonanalogous art*’ or ‘*teaches away*’ from the invention’ [sic] or is not recognized as solving the problem solved by the claimed invention, are not germane to a rejection under section 35 USC 102” (Ans. 45); and, in response to Appellant’s argument that it would not be desirable to combine the materials of the secondary references with the support materials of Smotkin and WO ‘777, “the burden is shifted to the appellants [sic] to provide objective evidence demonstrating that such other EIPC materials when used . . . in the membrane of Smotkin or the WO ‘777 [sic] will indeed cause detrimental effects thereto.” (Ans. 46).

[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

*KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418-19 (2007). “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.* at 418-19 (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). The fact finder must be aware “of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *KSR*, 550 U.S. at 421 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 36 (1966) (warning against a

“temptation to read into the prior art the teachings of the invention in issue”).)

A prima facie case of obviousness may be rebutted by evidence of unexpected results or a showing that the prior art teaches away from the claimed invention in any material respect. *In re Geisler*, 116 F.3d 1465, 1469-70 (Fed. Cir. 1997).

With regard to claims 78, 79, 87, and 88, we are in agreement with Appellant that the Examiner has not set forth proper motivation to combine the applied prior art in the manner claimed and, therefore, has failed to establish a prima facie case of obviousness. Appellant has discussed several reasons why the ordinary artisan would not have been motivated to modify Smotkin and WO ‘777 in view of the secondary references. The Examiner has completely disregarded Appellant’s teaching away argument as irrelevant to a rejection under 35 U.S.C. § 102. This argument is, however, relevant in the context of a rejection under 35 U.S.C. § 103(a), the only statutory basis cited by the Examiner in rejecting the claims as unpatentable over Smotkin and WO ‘777. (*See* App. Br. 12, 16, and 17 (noting that the Examiner has not rejected the claims as anticipated by Smotkin or WO ‘777).) To the extent the Examiner has responded to Appellant’s arguments, the Examiner has either failed to directly address Appellant’s arguments, mischaracterized Appellant’s arguments (*see e.g.*, Rep. Br. 4), or made statements which clearly disregard the relevant case law and are based not only on an overly broad interpretation of the claim language, but on a misquotation of the claim language (*see e.g.*, Ans. 46 (improperly attempting to shift the burden of persuasion to Appellant without having first met the PTO’s burden to establish a prima facie case of obviousness.); Ans. 42

(“[T]he specific claim language ‘*an inorganic or composite non-liquid material*’ has been construed as reciting either an inorganic material per se or a composite non-liquid material.”)).

In sum, Appellant has shown that the Examiner’s obviousness determinations as to claims 75-77, 80-82, 84-86, and 89-91 are based on erroneous findings that Smotkin and WO ‘777 disclose coating materials as claimed. Appellant has also shown that the Examiner reversibly erred in rejecting claims 78, 79, 87, and 88 because the Examiner has not properly explained the motivation to substitute the materials of the secondary references for the coatings used in Smotkin and WO ‘777. Therefore, we do not sustain the rejections of claims 75-82 and 84-91 under 35 U.S.C. § 103(a) as unpatentable over Smotkin or WO ‘777 in view of Norby, Crome, Ryu, or Lybye.

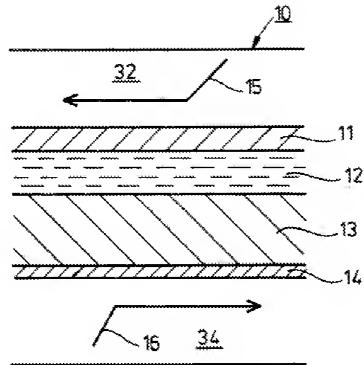
*Rejection of claims 75, 76, 80, 81, 84, 85, 89, and 90  
under 35 U.S.C. § 102(b) as anticipated by or, in the alternative,  
under 35 U.S.C. § 103(a) as unpatentable over Baucke*

The issue presented for our review with respect to this ground of rejection is: has Appellant shown reversible error in the Examiner’s finding that Baucke discloses a proton-conducting membrane having only a “single” metal or metal hydride support as required by claims 75 and 84?

We answer this question in the negative for the reasons that follow.

Figure 2 of Baucke is reproduced below:

Fig. 2



Baucke Fig. 2 is a schematic, cross-sectional plan view of a fuel cell 10. (Baucke, col. 6, ll. 6-7.)

In the exemplary embodiment shown in Figure 2, Baucke discloses a solid electrolyte layer 12 composed of  $Ta_2O_5$ . (Baucke, col. 7, l. 3.) The electrolyte layer 12 is positioned between an oxygen electrode composed of a nickel layer 11 and a hydrogen electrode composed of a 12.5  $\mu m$  thick nickel layer 13 covered by a palladium layer 14. (Baucke, col. 7, ll. 1-6.) Baucke teaches that palladium can be employed as an electrode material and that films and foils can be employed as electrodes and laminated onto the electrolyte. (Baucke, col. 4, ll. 11-13 and 19-23.)

The Examiner relies on the above-cited disclosure in finding that Baucke anticipates appealed claims 75, 76, 80, 81, 84, 85, 89, and 90. (Ans. 5-6.) The Examiner finds that Baucke's nickel layer 13 and electrolyte layer 12 correspond, respectively, to Appellant's claimed support and coating. (See Ans. 5-6 and 34.) Baucke's layers 12 and 13 are positioned between two layers 11 and 14 which can be employed as electrodes. (See Ans. 6.)



The Examiner finds that the structure formed by layers 11-14 is a MEA.<sup>5</sup> (*Id.*) The Examiner thus contends that Baucke's layers 12 and 13 are capable of use as an electrolyte in a fuel cell and, therefore, finds that layers 12 and 13 form a proton-conducting membrane as claimed in claims 75 and 84. (*Id.*)

Appellant does not present separate arguments in support of patentability as to any particular dependent claim. (*See* App. Br. 9-11.) Appellant does not dispute the Examiner's finding that the coating, as claimed in claims 75 and 84 reads on Baucke's layer 12. (*See id.*)

Appellant contends that Baucke describes an electrolyte sandwiched between two metal or metal hydride foils 11, 13 which serve as electrodes, but fails to disclose a support as required by independent claims 75 and 84. (App. Br. 9-10.)

"Anticipation of a patent claim requires a finding that the claim at issue 'reads on' a prior art reference." *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1346 (Fed Cir. 1999) (internal citations omitted). "In other words, if granting patent protection on the disputed claim would allow the patentee to exclude the public from practicing the prior art, then that claim is anticipated, regardless of whether it also covers subject matter not in the prior art." *Id.* When all of the elements of the claimed invention can be found in a prior art reference, either explicitly or inherently, the invention is said to be "anticipated." *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997). If the term "consists of" appears in the body of a claim, it limits the

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<sup>5</sup>"A generic representation for [Appellant's] MEA is: Anode/EIPC/Cathode." (Spec. 14:20-21.) *See also*, citations to Specification, *supra*, p. 8.

clause for which it acts as a transition to only those elements found in that particular clause. *In re Crish*, 393 F.3d 1253, 1257 (Fed. Cir. 2004).

Appellant appears to correctly understand the Examiner's position to be that at least one of Baucke's electrodes (11 or 13) corresponds to Appellant's claimed "*single* metal or metal hydride support." (See Rep. Br. 2-3.) However, in arguing that the Examiner cannot reasonably view one of Baucke's electrodes 11, 13 as a support and the other as an electrode (*id.*), Appellant misapprehends the Examiner's findings that layers 11 and 14 correspond to electrodes, while layers 12 and 13 form Appellant's claimed proton-conducting membrane. Layers 12 and 13 are sandwiched between layers (electrodes) 11 and 14 forming a MEA, the core of a fuel cell. (See note 5, *supra*, p. 16.) As acknowledged by Appellant, the fact that Baucke identifies layer 13 as an electrode and layer 14 as a covering layer is irrelevant to the Examiner's finding of anticipation. (Cf. App. Br. 12 (acknowledging that the disclosed function of a prior art layer is irrelevant for purposes of anticipation).)

Because Appellant has not shown reversible error in the facts relied on by the Examiner in rejecting the claims as anticipated by Baucke, we sustain the rejection of these claims as unpatentable over Baucke under 35 U.S.C. § 102(b), as well as under 35 U.S.C. § 103(a).

## CONCLUSION

In view of Appellant's persuasive showing of reversible error, we do not sustain the following rejections:

claims 84-91 under 35 U.S.C. § 112, second paragraph, as indefinite;

claims 75-82 and 84-91 under 35 U.S.C. § 103(a) as unpatentable over Smotkin in view of Norby, Crome, Ryu, or Lybye; and

claims 75-82 and 84-91 under 35 U.S.C. § 103(a) as unpatentable over WO '777 in view of Norby, Crome, Ryu, or Lybye.

Because Appellant has not identified reversible error in the Examiner's findings that claims 75, 76, 80, 81, 84, 85, 89, and 90 are anticipated by Baucke, we sustain the rejection of these claims as unpatentable over Baucke under 35 U.S.C. § 102(b), as well as under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

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